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PTO/SB/05(11-00)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No. F97ED0740-DIV3

First Inventor Norio TAKAHASHI

Title MODULE CIRCUIT BOARD FOR SEMICONDUCTOR DEVICE HAVING
BARRIERS TO ISOLATE I/O TERMINALS FROM SOLDER

Express Mail Label No.

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
 2. ☐ Applicant claims small entity status.
See 37 CFR 1.27
 3. ☒ Specification (Total Pages
(preferred arrangement set forth below)
 - Descriptive title of the Invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R&D
 - Reference to sequence listing, a table,
or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
 4. ☒ Drawing(s) (35 U.S.C. 113) (Total Sheets
[Total Sheets - 5. Oath or Declaration (Total Pages
[Total Pages - a. ☐ Newly executed (original or copy)
 - b. ☒ Copy from a prior application (37 C.F.R. 1.63(d))
(for continuation/divisional with Box 18 completed)
 - i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
named in the prior applications, see 37 CFR
1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
 - a. ☐ Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 C.F.R. 3.73(b) Statement ☐ Power of
(when there is an assignee) Attorney
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure ☒ Copies of IDS
Statement (IDS)/PTO-1449 Citations
13. ☒ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Request and Certification under 35 U.S.C. 122
(b)(2)(B)(i). Applicant must attach from PTO/SB/35
or its equivalent.
17. ☒ Other:
 - Copy of Assignment Papers
 - Notices of References cited in Parent Applications
 - Copy of Change of Correspondence Address
 - Submission of Formal drawings

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment or in an Application Data Sheet under 37 CFR 1.76:


☐ Continuation ☒ Divisional ☐ Continuation-in-part (CIP) of prior application No. 10/289,358, which is div. from 10/022,285, which is div. from 09/450,504

Prior application information: Examiner Ishwar B Patel Group / Art Unit: 2841

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

<input checked="" type="checkbox"/> Customer Number or Bar Code Label		<div style="border: 1px solid black; padding: 10px; text-align: center; font-size: 2em;">26071</div>		<input type="checkbox"/> Correspondence address below	
Name	Junichi Mimura				
Address	OKI America, Inc. 1101 14th Street, N.W., Suite 555				
City	Washington	State	DC	Zip Code	20005
Country	U.S.	Telephone	(202) 452-6190	Fax	(202) 452-6148

Name (Print/Type)	Junichi Mimura	Registration No. (Attorney/Agent)	40,351
Signature		Date	February 11, 2004

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17510 U.S. PTO
10/775232



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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 770

Complete if Known

Application Number	To Be Assigned
Filing Date	February 11, 2004
First Named Inventor	Norio TAKAHASHI
Examiner Name	To Be Assigned
Art Unit	To Be Assigned
Attorney Docket No.	F97ED0740-DIV3

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None
☒ Deposit Account:
 Deposit
Account
Number
Deposit
Account
Name

50-0945

OKI America, Inc.

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity/Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	770
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$) 770

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Independent Claims	Multiple Dependent	Extra Claims	Fee from below	Fee Paid
11	1		20** =	0 x 18 =	0
			3** =	0 x 84 =	0
				0 =	0

Large Entity/Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	**Reissue independent claims over original patent
1205	18	2205	9	**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	


Other fee (specify)

*Reduced by Basic Filing Fee Paid SUBTOTAL (3)

(\$)

SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Junichi MIMURA	Registration No. (Attorney/Agent)	40,351	Telephone	(202) 452-6190
Signature		Date	February 11, 2004		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit of parent application: 2841

Examiner of parent application: Ishwar B Patel

In Re PATENT APPLICATION Of:

Applicant : Norio TAKAHASHI)

Appln. No. : To be assigned)

Div of Ser. No. : 10/289,358, which is division of)
10/022, 285, which is division of)
09/450,504)

Filed : Herewith)

For : MODULE CIRCUIT BOARD)
FOR SEMICONDUCTOR)
DEVICE HAVING BARRIERS)
TO ISOLATE I/O TERMINALS)
FROM SOLDER)

Attorney Ref.: F97ED0740-DIV3)

**SUBMISSION OF
FORMAL DRAWINGS**

February 11, 2004

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith are three (3) replacement sheets of drawings, and changes are made in all Figures. The changes in Figs 1A, 2A, 3A, 4A, 5A and 6A are being made in conformance with requirements of Notice of Draftsperson's Patent Drawing Review in an original application (09/450,504), and these changes were approved by the examiner during the prosecution of that application. The changes in Figs 1B, 2B, 3B, 4B, 5B and 6B have been approved by the

examiner in the prosecution of the first divisional application (10/022,285). That is, sectional designations are changed:

- (a) from A-A' to I-I' in Fig. 1A,
- (b) from B-B' to II-II' in Fig. 2A,
- (c) from C-C' to III-III' in Fig. 3A,
- (d) from D-D' to IV-IV' in Fig. 4A,
- (e) from E-E' to V-V' in Fig. 5A, and
- (f) from F-F' to VI-VI' in Fig. 6A

Further, cross hatching patterns are added in Fig. 1B, Fig. 2B, Fig. 3B, Fig. 4B, Fig. 5B and Fig. 6B.

Respectfully submitted,



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Date February 11, 2004

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PTO/SB/122 (11-96)

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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**CHANGE OF
CORRESPONDENCE ADDRESS
Application**

Address to:
Assistant Commissioner for Patents
Washington, D.C. 20231

Application Number	09/450,504
Filing Date	November 30, 1999
First Named Inventor	Norio TAKAHASHI
Group Art Unit	2835
Examiner Name	To Be Assigned
Attorney Docket Number	F97ED0740

Please change the Correspondence Address for the above-identified application to:

☐

Customer Number

Type Customer Number here

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Number Bar Code
Label here

OR

<input checked="" type="checkbox"/> Firm or Individual Name	OKI America, Inc.				
Address	1101 14th Street, N.W., Suite 555				
Address					
City	Washington	State	DC	ZIP	20005
Country	U. S. A.				
Telephone	(202) 452 - 6190		Fax	(202) 452 - 6148	

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I am the :

☐


Applicant.

☐

Assignee of record of the entire interest.
Certificate under 37 CFR 3.73(b) is enclosed.

☒

Attorney or agent of record.

Typed or Printed Name	Junichi Mimura (Registration No. 40,351)
Signature	
Date	June 27, 2000

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